

10670073>11/21/2006

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NEWS 4 AUG 28 ADISCTI Reloaded and Enhanced  
NEWS 5 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes  
NEWS 6 SEP 11 CA/CAplus enhanced with more pre-1907 records  
NEWS 7 SEP 21 CA/CAplus fields enhanced with simultaneous left and right truncation  
NEWS 8 SEP 25 CA(SM)/CAplus(SM) display of CA Lexicon enhanced  
NEWS 9 SEP 25 CAS REGISTRY(SM) no longer includes Concord 3D coordinates  
NEWS 10 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine  
NEWS 11 SEP 28 CEABA-VTB classification code fields reloaded with new classification scheme  
NEWS 12 OCT 19 LOGOFF HOLD duration extended to 120 minutes  
NEWS 13 OCT 19 E-mail format enhanced  
NEWS 14 OCT 23 Option to turn off MARPAT highlighting enhancements available  
NEWS 15 OCT 23 CAS Registry Number crossover limit increased to 300,000 in multiple databases  
NEWS 16 OCT 23 The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded  
NEWS 17 OCT 30 CHEMLIST enhanced with new search and display field  
NEWS 18 NOV 03 JAPIO enhanced with IPC 8 features and functionality  
NEWS 19 NOV 10 CA/CAplus F-Term thesaurus enhanced  
NEWS 20 NOV 10 STN Express with Discover! free maintenance release Version 8.01c now available  
NEWS 21 NOV 13 CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role  
NEWS 22 NOV 20 CAS Registry Number crossover limit increased to 300,000 in additional databases  
NEWS 23 NOV 20 CA/CAplus to MARPAT accession number crossover limit increased to 50,000  
NEWS 24 NOV 20 CA/CAplus patent kind codes will be updated  
  
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.  
  
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STRUCTURE FILE UPDATES: 20 NOV 2006 HIGHEST RN 913686-03-0  
DICTIONARY FILE UPDATES: 20 NOV 2006 HIGHEST RN 913686-03-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

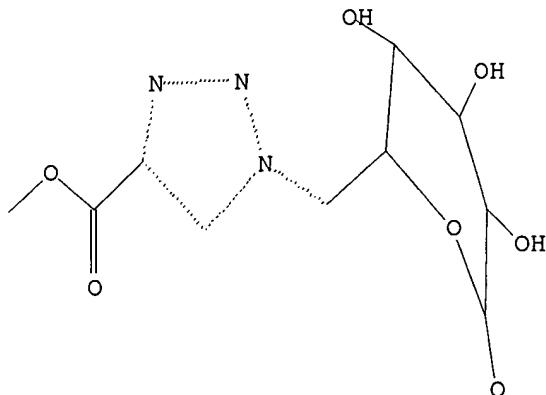
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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FULL SCREEN SEARCH COMPLETED -      178 TO ITERATE

100.0% PROCESSED      178 ITERATIONS          4 ANSWERS
SEARCH TIME: 00.00.01
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COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	166.94	167.15

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 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

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L3 3 L2

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L3 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN	
ACCESSION NUMBER:	2004:1126986 HCAPLUS
DOCUMENT NUMBER:	142:73491
TITLE:	Glycorandomization and production of novel vancomycin analogs
INVENTOR(S):	Thorson, Jon
PATENT ASSIGNEE(S):	Wisconsin Alumni Research Foundation, USA
SOURCE:	U.S. Pat. Appl. Publ., 79 pp., Cont.-in-part of U.S. Ser. No. 109,672.
CODEN: USXXCO	
DOCUMENT TYPE:	Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004259228	A1	20041223	US 2003-670073	20030924
US 2003068669	A1	20030410	US 2002-109672	20020401
US 6884604	B2	20050426		
US 2005266523	A1	20051201	US 2005-907692	20050412
US 2005239689	A1	20051027	US 2005-908624	20050519
PRIORITY APPLN. INFO.:			US 2001-279682P	P 20010330
			US 2002-109672	A2 20020401
			US 2003-670073	A2 20030924

OTHER SOURCE(S): CASREACT 142:73491

AB The present invention provides combinatorial methods for rapidly generating a diverse library of glycorandomized structures, comprising incubating 1 or more aglycons and a pool of NDP-sugars in the presence of a glycosyltransferase. The glycosyltransferase may be one that is associated with or involved in production of natural secondary metabolites, or one which is putatively associated with or involved in production of natural secondary metabolites. The glycosyltransferase may show significant flexibility with respect to its NDP-sugar donors and/or its aglycons. NDP-sugar donors may be com. available, or may be produced by utilizing mutant or wild type nucleotidyltransferases with significant flexibility with respect to their substrates.

IT 666219-98-3P 666220-35-5P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(glycorandomization and production of novel vancomycin analogs)

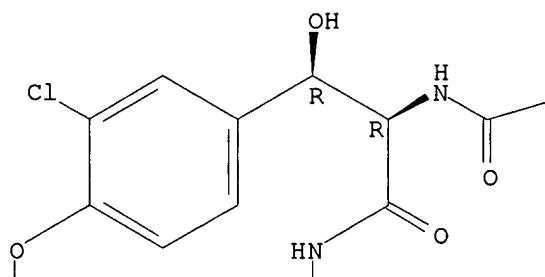
RN 666219-98-3 HCAPLUS

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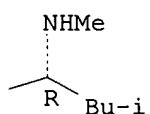
Absolute stereochemistry.

10670073>11/21/2006

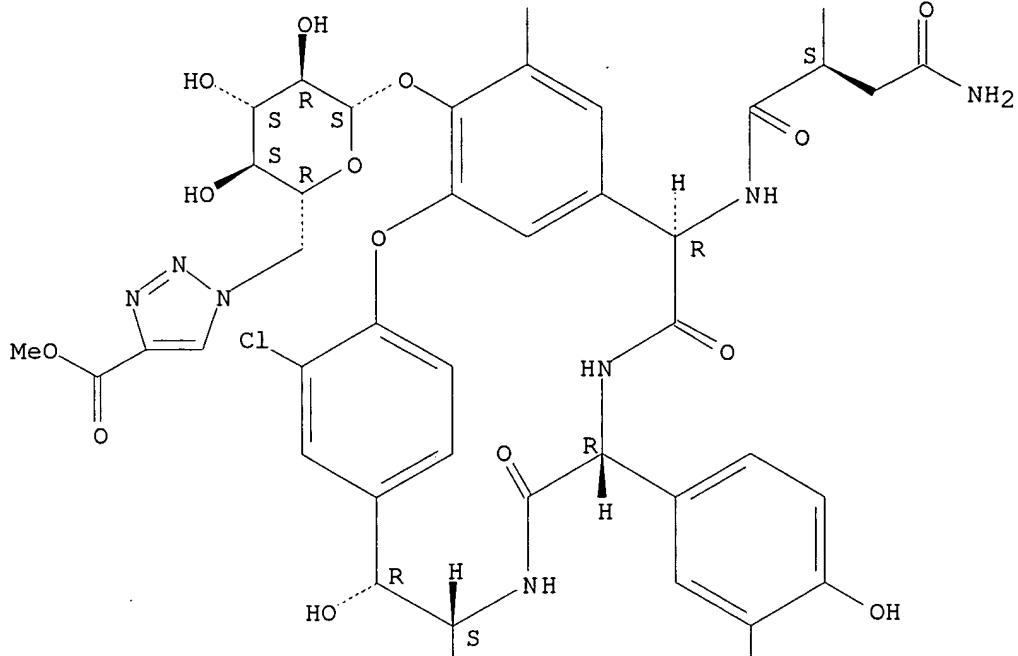
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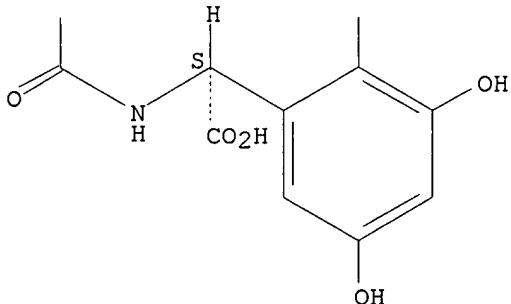
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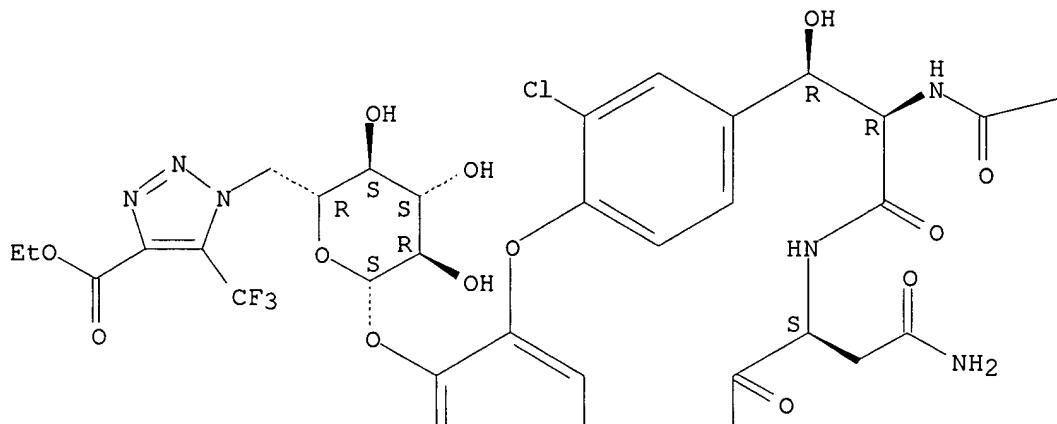
RN 666220-35-5 HCAPLUS

CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl-alpha-L-lyxohexopyranosyl)-6'-deoxy-6'-(4-ethoxycarbonyl)-5-(trifluoromethyl)-1H-1,2,3-triazol-1-yl]-(9CI) (CA INDEX NAME)

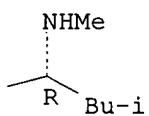
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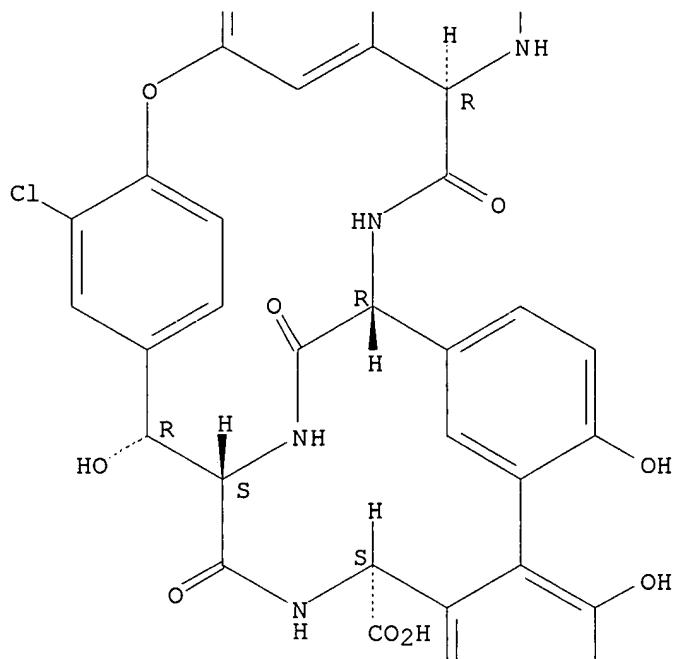
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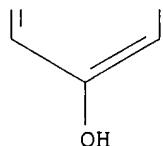
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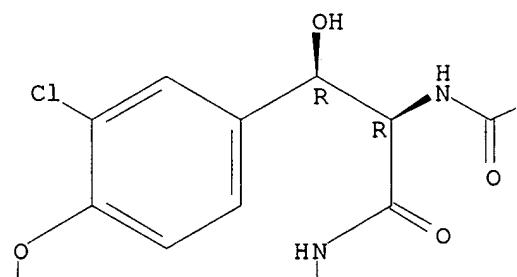


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 (glycorandomization and production of novel vancomycin analogs)
- RN 666220-00-4 HCAPLUS
- CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-6'-(4-[(1,1-dimethylethoxy)carbonyl]-1H-1,2,3-triazol-1-yl)-(9CI) (CA INDEX NAME)

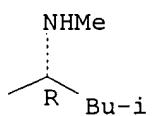
Absolute stereochemistry.

10670073>11/21/2006

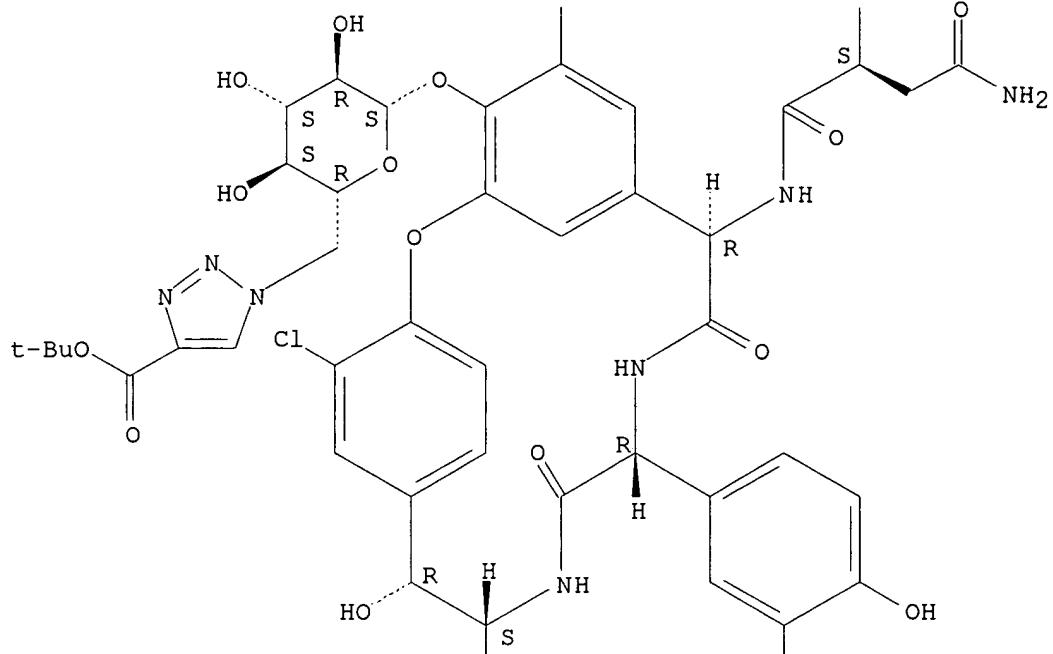
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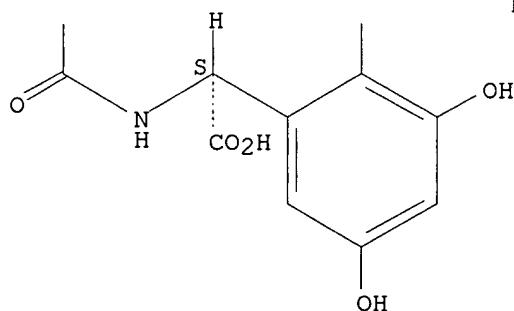
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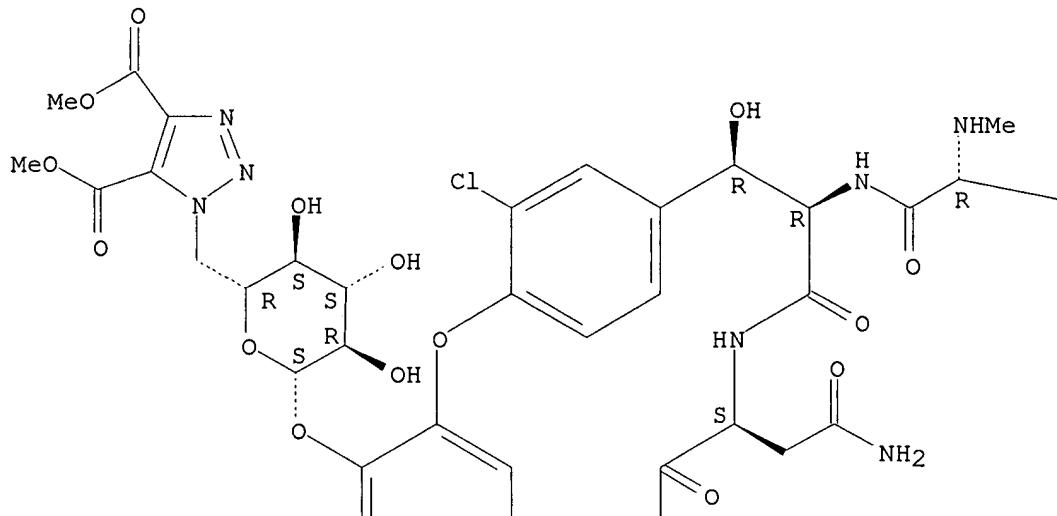
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CN Vancomycin, 6'-[4,5-bis(methoxycarbonyl)-1H-1,2,3-triazol-1-yl]-2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

10670073>11/21/2006

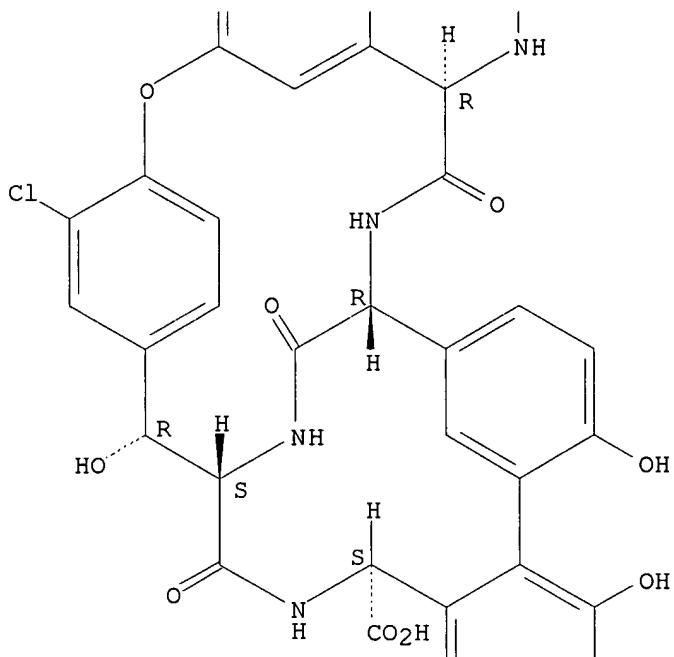
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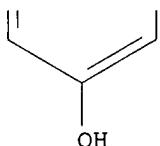
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L3 ANSWER 2 OF 3 HCPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:925666 HCPLUS  
 DOCUMENT NUMBER: 140:217887  
 TITLE: Antibiotic optimization via in vitro glycorandomization  
 AUTHOR(S): Fu, Xun; Albermann, Christoph; Jiang, Jiqing; Liao, Jianchun; Zhang, Changsheng; Thorson, Jon S.  
 CORPORATE SOURCE: School of Pharmacy, Laboratory for Biosynthetic Chemistry, University of Wisconsin-Madison, Madison, WI, 53705, USA  
 SOURCE: Nature Biotechnology (2003), 21(12), 1467-1469  
 CODEN: NABIF9; ISSN: 1087-0156  
 PUBLISHER: Nature Publishing Group  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 140:217887  
 AB In nature, the attachment of sugars to small mols. is often used to mediate targeting, mechanism of action and/or pharmacol. As an alternative to pathway engineering or total synthesis, we report a useful method, in vitro glycorandomization (IVG), to diversify the glycosylation patterns of complex natural products. We have used flexible

glycosyltransferases on nucleotide diphospho-sugar (NDP-sugar) libraries to generate glyco-randomized natural products and then applied chemoselective ligation to produce mono-glycosylated vancomycins that rival vancomycin.

IT 666219-98-3P 666220-35-5P

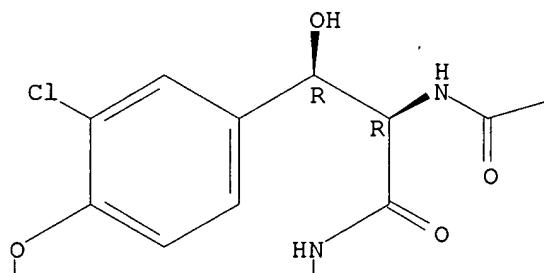
RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of antibiotic mono-glycosylated vancomycins and optimization via in vitro glycorandomization)

RN 666219-98-3 HCAPLUS

CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-6'-(4-(methoxycarbonyl)-1H-1,2,3-triazol-1-yl)-(9CI) (CA INDEX NAME)

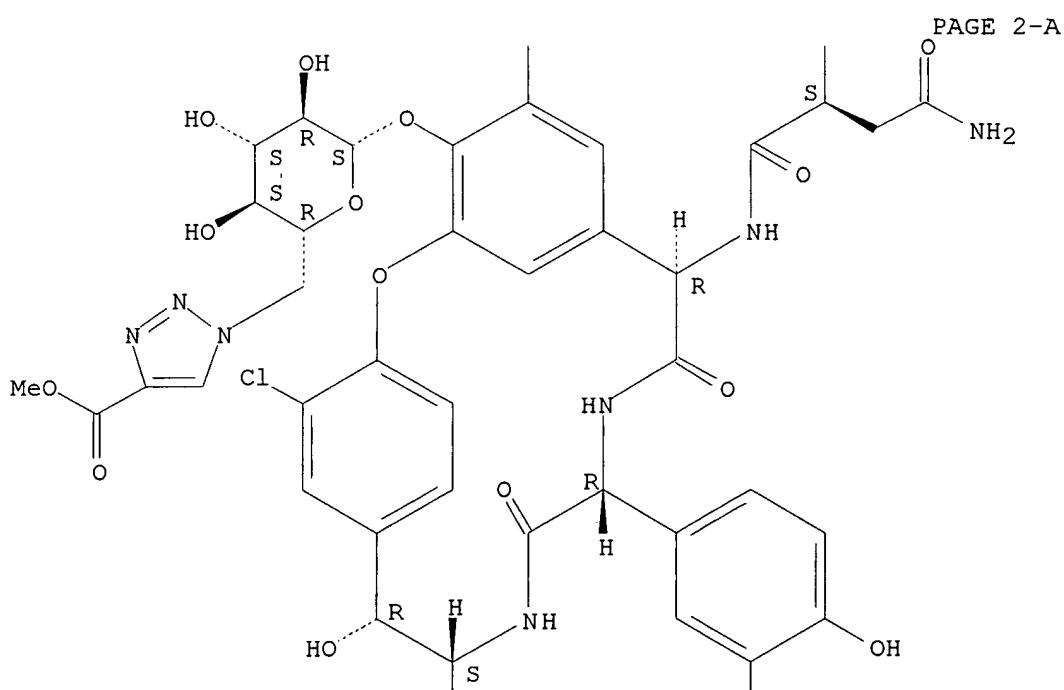
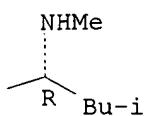
Absolute stereochemistry.

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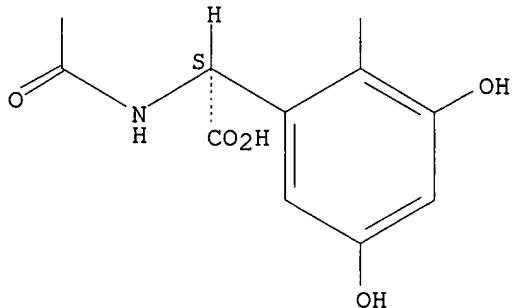


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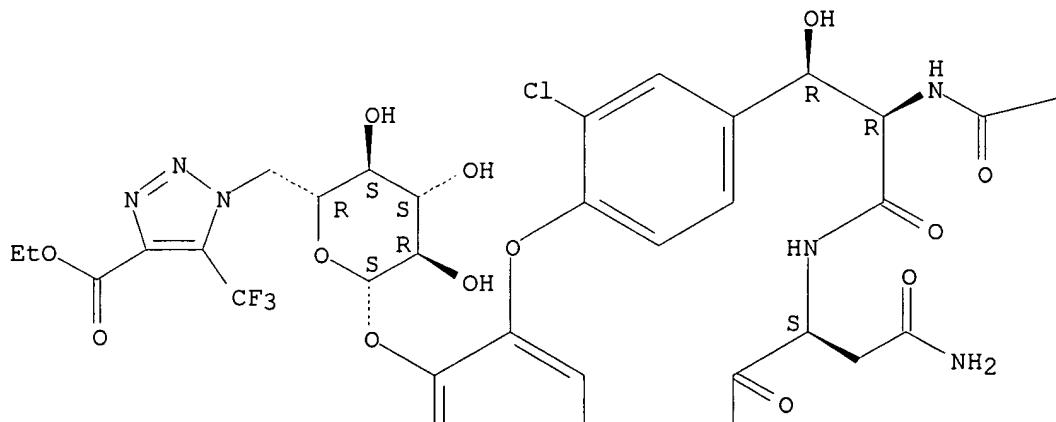


RN 666220-35-5 HCPLUS

CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-6'-(4-(ethoxycarbonyl)-5-(trifluoromethyl)-1H-1,2,3-triazol-1-yl)-(9CI) (CA INDEX NAME)

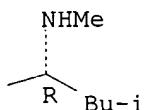
Absolute stereochemistry.

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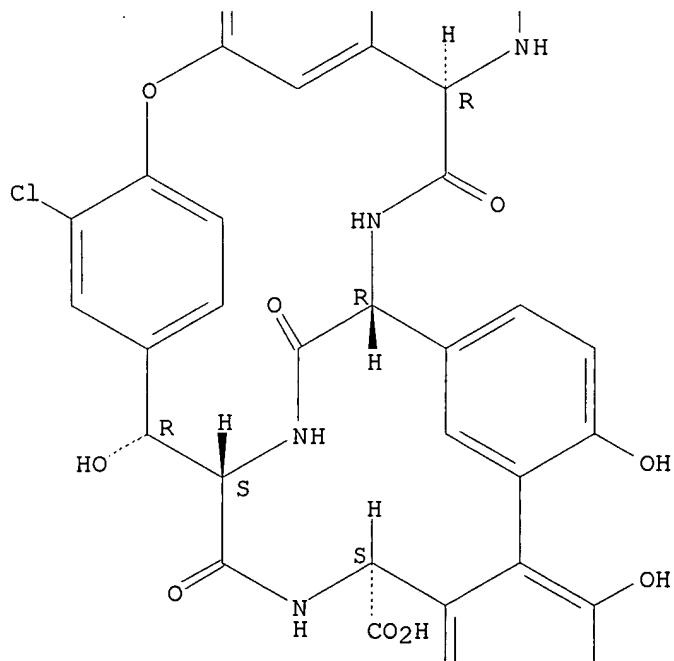


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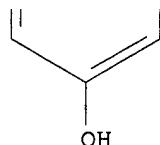
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IT 666220-00-4P 666220-10-6P  
RL: BPN (Biosynthetic preparation); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation)  
(preparation of antibiotic mono-glycosylated vancomycins and optimization)

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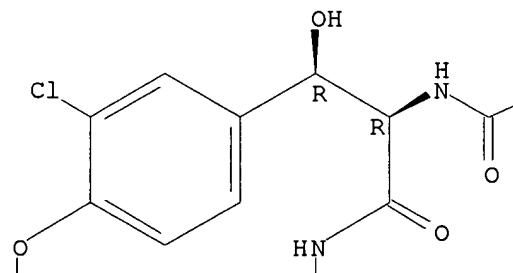
via in vitro glycorandomization)

RN 666220-00-4 HCAPLUS

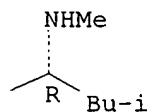
CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-6'-(4-[(1,1-dimethylethoxy)carbonyl]-1H-1,2,3-triazol-1-yl)-(9CI) (CA INDEX NAME)

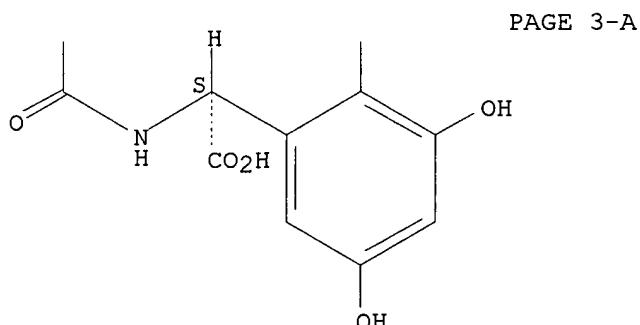
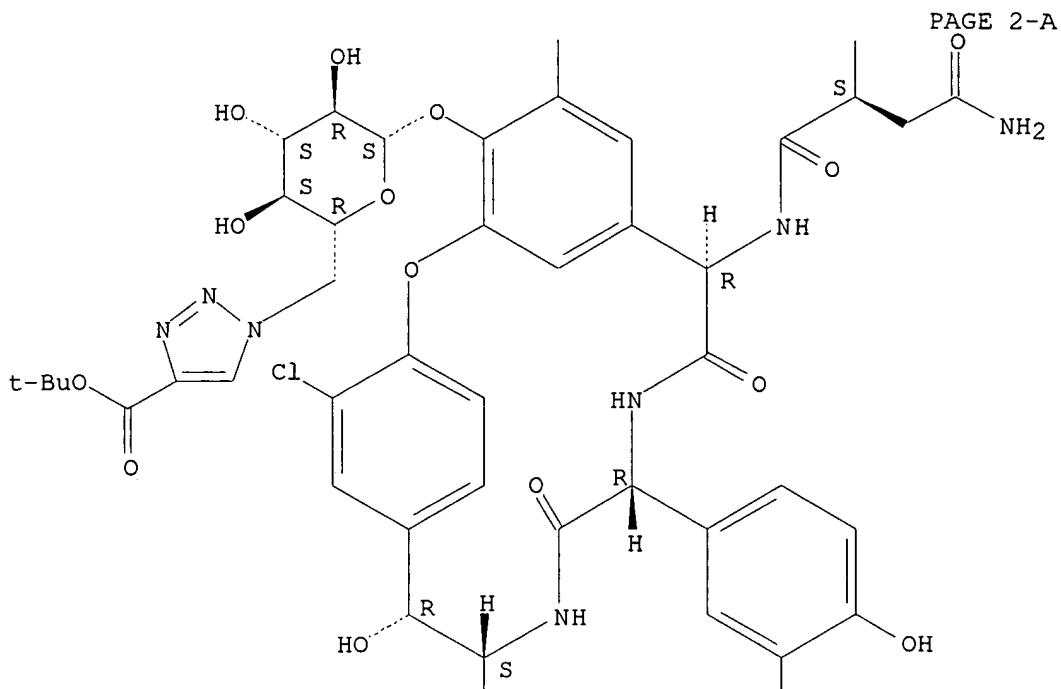
Absolute stereochemistry.

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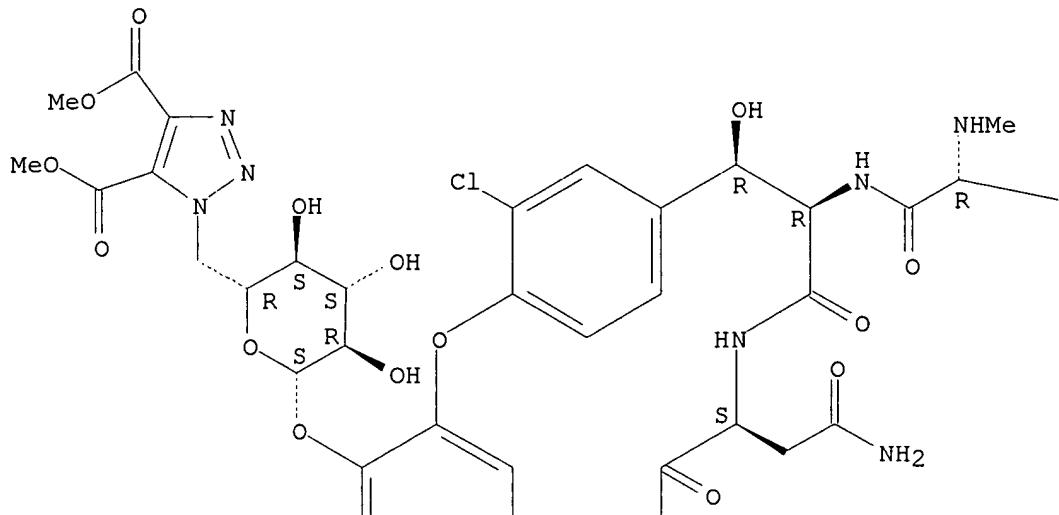
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CN Vancomycin, 6'-[4,5-bis(methoxycarbonyl)-1H-1,2,3-triazol-1-yl]-2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

10670073>11/21/2006

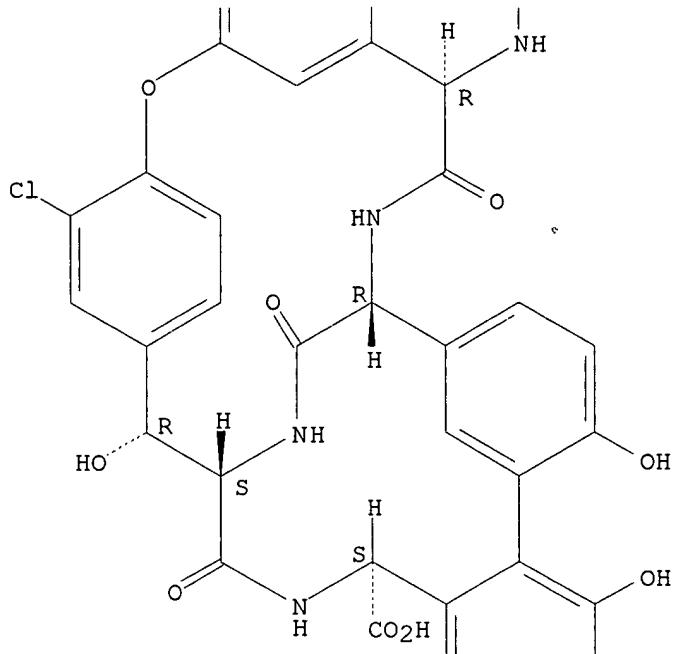
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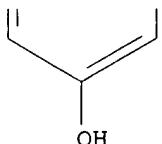
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REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 USPATFULL on STN

ACCESSION NUMBER: 2004:327408 USPATFULL

TITLE: Glycorandomization and production of novel vancomycin analogs

INVENTOR(S): Thorson, Jon, Middleton, WI, UNITED STATES

PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 2004259228 A1 20041223

APPLICATION INFO.: US 2003-670073 A1 20030924 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-109672, filed on 1 Apr 2002, PENDING

NUMBER	DATE
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PRIORITY INFORMATION: US 2001-279682P 20010330 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 17 Drawing Page(s)

LINE COUNT: 3698

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides combinatorial methods for rapidly generating a diverse library of glycorandomized structures, comprising incubating one or more aglycons and a pool of NDP-sugars in the presence of a glycosyltransferase. The glycosyltransferase may be one that is associated with or involved in production of natural secondary metabolites, or one which is putatively associated with or involved in production of natural secondary metabolites. The glycosyltransferase may show significant flexibility with respect to its NDP-sugar donors and/or its aglycons. NDP-sugar donors may be commercially available, or may be produced by utilizing mutant or wild type nucleotidyltransferases significant flexibility with respect to their substrates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 666219-98-3P 666220-35-5P

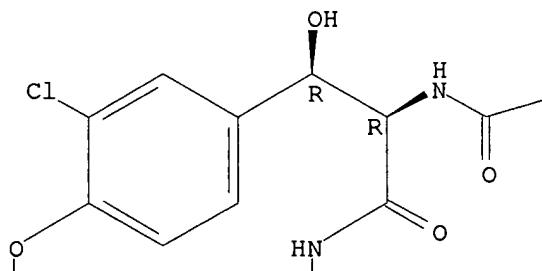
(glycorandomization and production of novel vancomycin analogs)

RN 666219-98-3 USPATFULL

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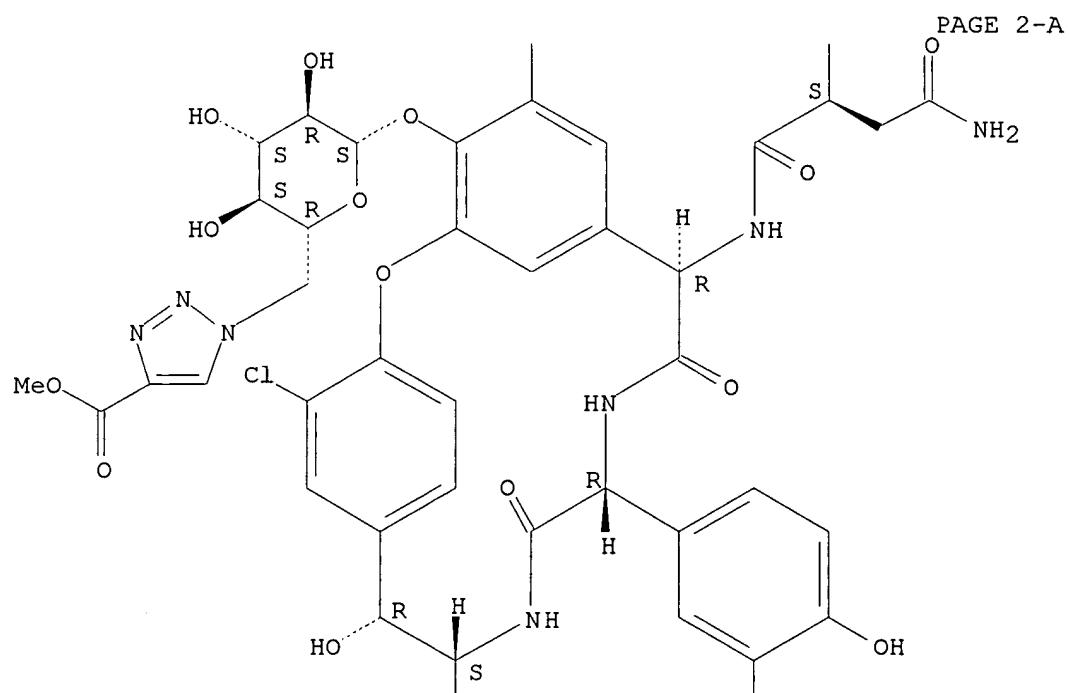
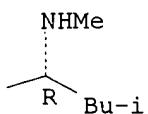
Absolute stereochemistry.

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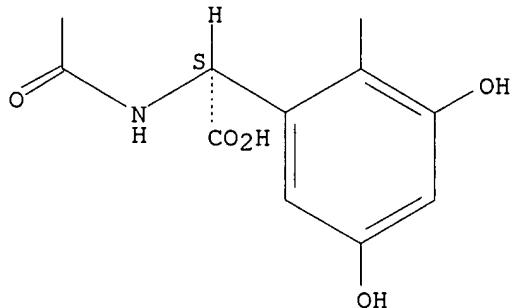
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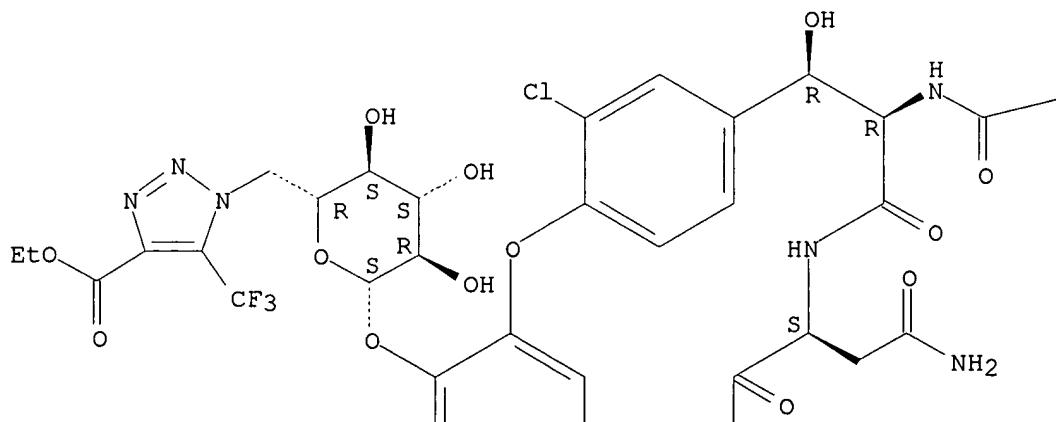


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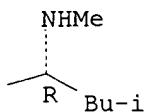
CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl- $\alpha$ -L-lyxo-hexopyranosyl)-6'-deoxy-6'-(4-(ethoxycarbonyl)-5-(trifluoromethyl)-1H-1,2,3-triazol-1-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

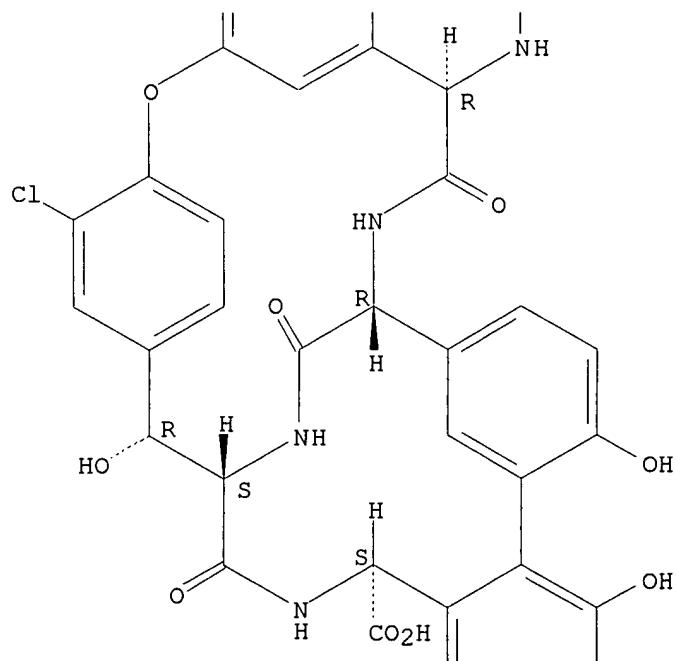
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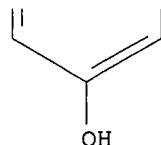
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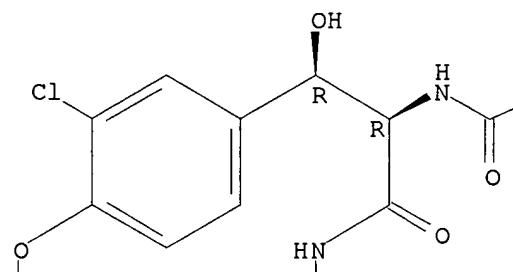
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(glycorandomization and production of novel vancomycin analogs)  
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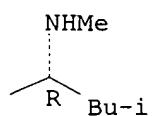
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Absolute stereochemistry.

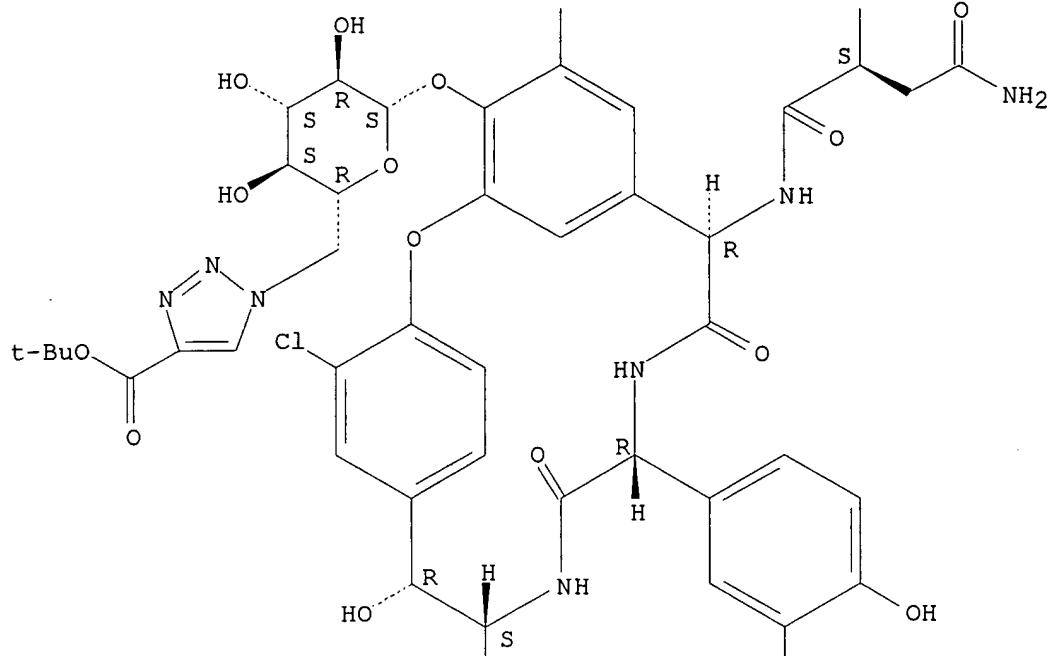
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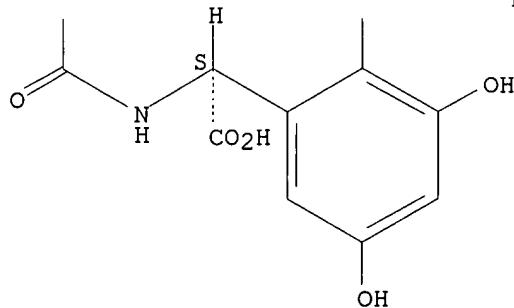
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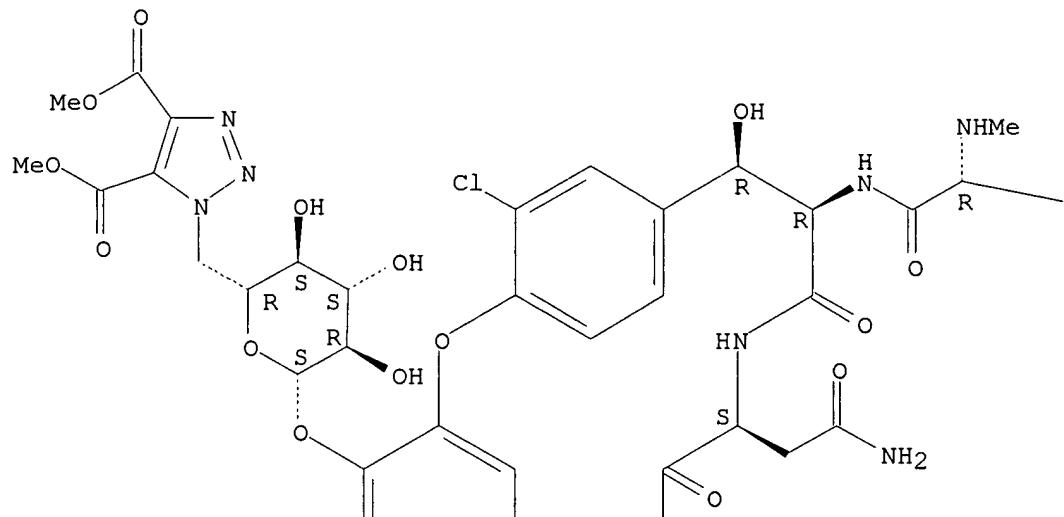
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Absolute stereochemistry.

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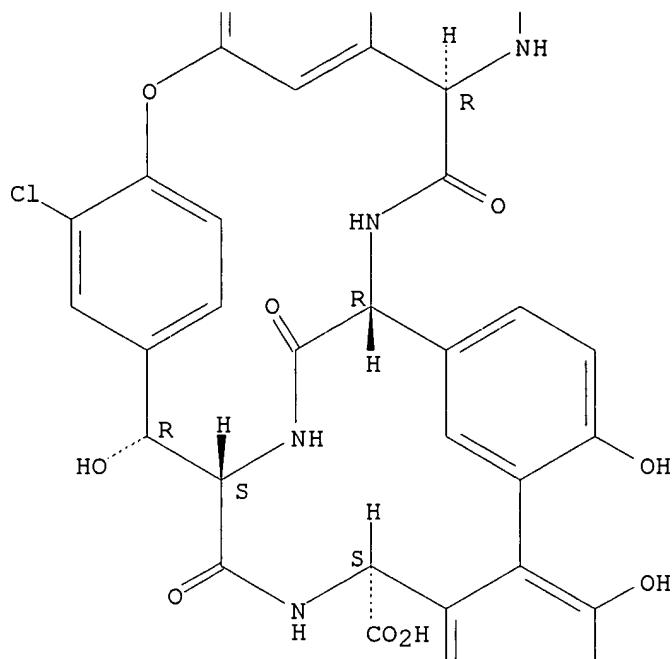
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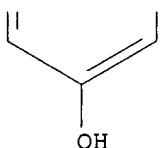
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L1 STRUCTURE uploaded

DIS

L2 4 SEA SSS FUL L1

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L3 3 SEA ABB=ON PLU=ON L2  
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